# DJN Glance

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#### 1 Task:

#### 1.1 On DJN

The first task on Dow Jones News is to get familiar with the data and have a glance at the content interested. In specific,

- Details on the data structure
- Distribution of count of DJ News per day
- Distribution of tags over the sample period, including tags:
  - subject: Economic/Monetary Policy
  - subject: Federal Funds Rate
  - subject: Interest Rates, U.S.
  - region: United States
- Search filtering certain text, including (b.c. case sensitive)
  - Federal Reserve
  - Federal reserve
  - federal reserve
  - federal Reserve
  - The Fed
  - the fed
  - the Fed
  - The fed
- Estimate time to download an annual subsample, using the Year 2016

### 1.2 On WSJ

The second task is to do the same analysis on the Wall Street Journal Analysis.

### 2 Tag Definition

- subject: Economic/Monetary Policy --> N/EMP
- subject: Federal Funds Rate --> N/FFR
- subject: Interest Rates, U.S. --> N/FIN
- region: United States -->R/US

#### 3 Distribution of Articles

Here are the two graphs for the distribution of articles under 1) "The Federal" or "The Fed" in content, and 2) Monetary Policy (EMP), Federal Fund Rate (FFR), or U.S. Interest Rate (FIN) related. Here are the Monthly frequency level graphs in Figure 1-6. Also one for comparison at the monthly level Figure 7 and annual level Figure 8, separately. Here are the summary statistics for each tag and work filtering.

	Obs	Mean	Median	Std	Min	Max
All Tags	303	1734.4	1084	2300.3	1	12360
Monetary Policy	130	1484.2	1415.5	390.5	797	2798
Federal Fund Rate	274	56.70	43.50	52.13	1	422
U.S. Interest Rate	303	1406.1	634	2362.4	1	12359
Word Filter: The Fed / Federal Reserve	312	3495.2	3631.5	1219.6	8	6119
Word Filter: The Fed / Federal Reserve + U.S. Tag	306	2533.3	2712	1036.7	3	4503

<sup>1)</sup> Monthly frequency. 2) U.S. Tag refers to U.S. Region Tag

Table 1: Statistical Summary

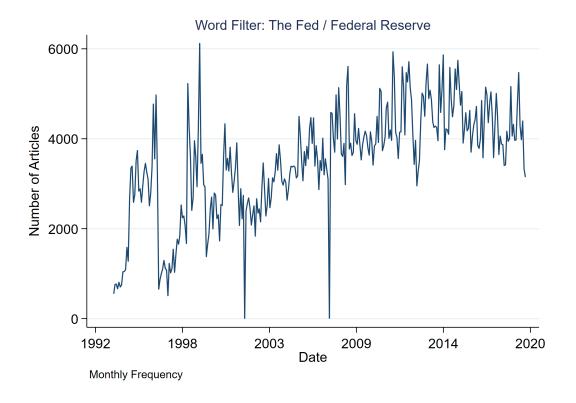


Figure 1: Federal Word Related

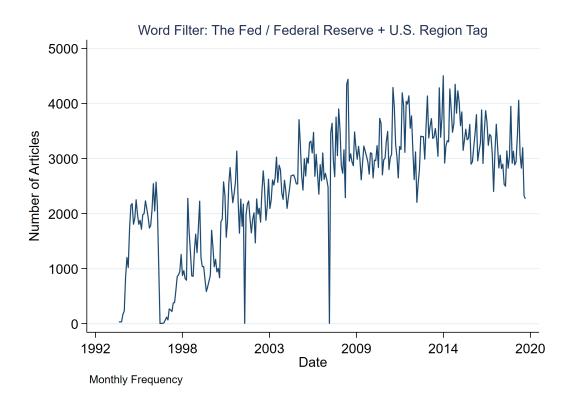


Figure 2: Federal Word Related

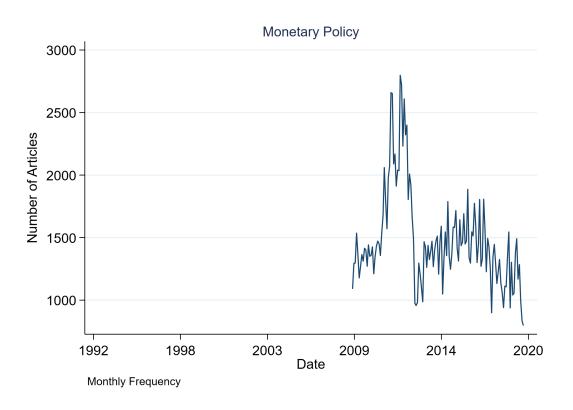


Figure 3: Tags Related

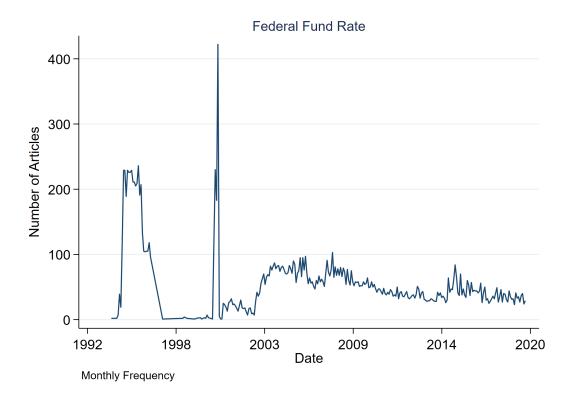


Figure 4: Tags Related

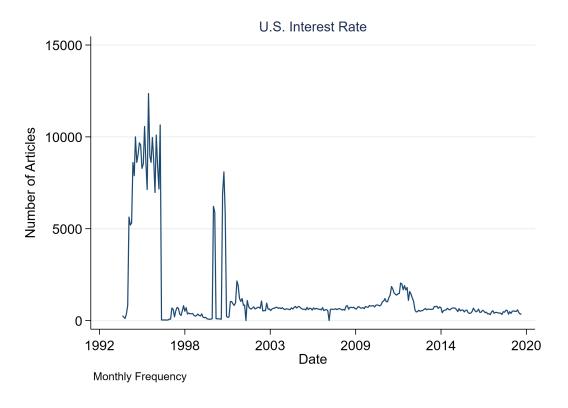


Figure 5: Tags Related

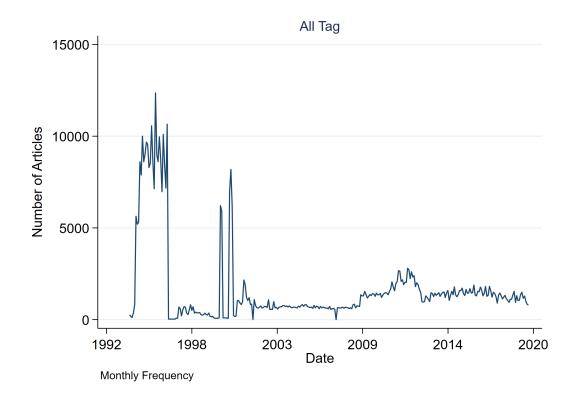


Figure 6: Tags Related

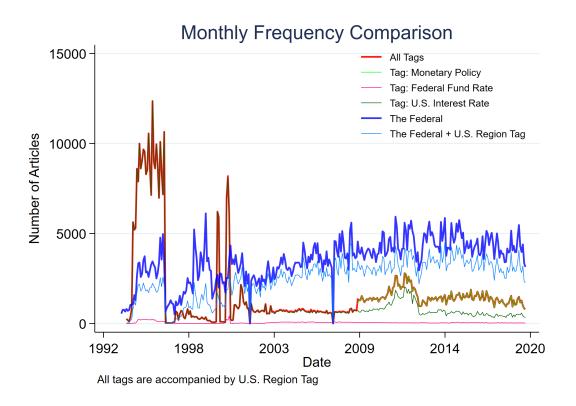


Figure 7: Comparison

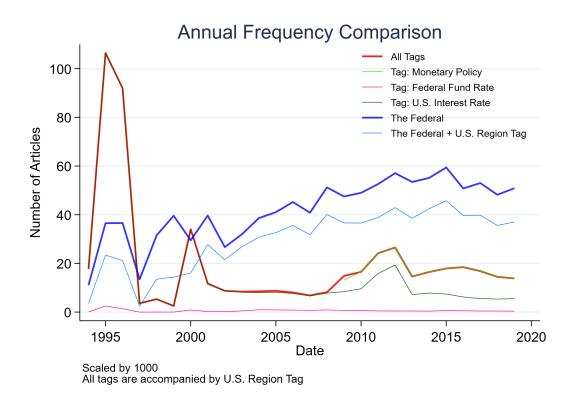


Figure 8: Comparison

## 4 Detail Investigation

#### 4.1 Starting point of Monetary Policy

The first investigation conducted is the starting point of the Monetary Policy Tag. I looked into the database and tried to find any article with the tag of Monetary Policy before the Year 2009, but there is nothing. I will double-check this point with Yabra.

### 4.2 Sudden Changes in Number of Articles

There are multiple timestamps where the number of articles under certain filtering drops or rises dramatically. I recorded them here for future checks into the database.

- All Tags (Same as Tag: U.S. Interest Rate):
  - Dec 1994
  - Nov 1996
  - Mar 2000
  - May 2000
  - Dec 2000
  - Apr 2001
  - Jan 2013
- The Federal
  - Dec 1994
  - Nov 1996
  - Sep 1998
  - $-\ Jun\ 1999$
  - $-\ \mathrm{Apr}\ 2002$
  - Aug 2007
  - Feb 2013

I compared the graph with the monthly total amount of articles in the database. It looks like it is more of a database size change (or DJN event) rather than any tag-related or Federal-related event.

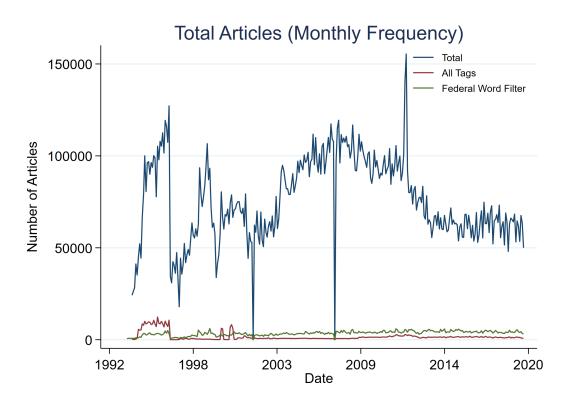


Figure 9: Total Articles

# 5 Wall Street Journal

Here is a similar analysis of articles from the Wall Street Journal.